

WE CLAIM:

1. An injection unit for an injection-molding machine for processing thermoplastic material, the injection-molding machine having a screw which is guided in a cylinder and the axial movement of which can be initiated by a first motor and the rotary movement of which can be initiated by a second motor, an electrical direct drive being provided as the first motor, wherein only the second motor is connected to the screw via a gear mechanism in such a way that the rotational speed of the second motor can be reduced to a lower speed of the screw adapted to the material-preparing process.
2. The injection unit according to claim 1, wherein the gear mechanism can be blocked during the operation of injecting the thermoplastic material.
3. The injection unit according to claim 2, wherein a non-return valve is provided as the block.
4. The injection unit according to claim 2, wherein a belt-pulley gear is provided as the gear mechanism.
5. The injection unit according to claim 1, wherein the first motor rotatably moves a spindle which is connected to the screw via a displaceably secured spindle nut.